



November 5, 2002

Mr. Duc Nguyen, OSC  
On-Scene Coordinator  
USEPA Region 8 Emergency Response Program  
501 Mineral Avenue  
Libby, MT 59923

SUBJECT: Soil Disposal Criteria Sampling ~ BNSF Libby  
Railyard Biotite Removal, Libby, Montana  
EMR Project No. 5539.003-1

Dear Mr. Nguyen,

Per your request, this letter is written to address our sampling plan for collecting soil samples to profile soil prior to transport to the Lincoln County Landfill in Libby, Montana.

In an October 23, 2002 meeting at the EPA Information Center in Libby, MT, a concern was raised regarding soil disposal at the Lincoln County landfill. Ron Anderson (in attendance at the meeting) of Lincoln County stated that because the landfill was not designed to take other wastes besides asbestos, we would need to contact Mr. Pat Crowley of Montana Department of Environmental Quality (DEQ) to determine soil testing requirements for landfill disposal.

Upon contacting Mr. Pat Crowley, we presented our sampling plan as follows:

East of the Overpass:

East of the highway overpass, that bisects the railyard we proposed to collect four (4) discrete samples for each track with visible hydrated biotite. Each track would have it's own composite sample that would consist of a portion of each discrete sample. Based on the four tracks (Track 1 through Track 4) affected, this amounted to 16 discrete samples and four composites.

West of the Overpass

West of the highway overpass we proposed to collect four (4) discrete samples for each track with visible hydrated biotite. Again, each track would have it's own composite sample that would consist of a portion of each discrete sample. Based on three tracks

affected (Tracks 2 through 4), this amounted to 12 discrete samples and three composites.

Montana DEQ Requirements for Soil Disposal Characterization

After briefing Mr. Crowley on our sampling plan, he stated that Montana DEQ would require three sets of analyses:

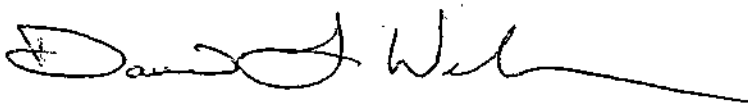
- 1) RCRA 8 Metals
- 2) TPH (to include gasoline, diesel and oil range)
- 3) And Volatiles by EPA 8260.

All of the composites would have required analyses for RCRA 8 Metals and TPH. Half of the composites would have required analyses for volatiles by EPA 8260. If any constituents were identified in the composite samples above action levels, then additional analyses would be required to include semi-volatile organics and PCBs. Also, if composite results indicate any elevated concentrations of the analytes tested, the discrete samples will be tested.

Attached are DRAFT site drawings (Figure 1 and Figure 2) that show the approximate locations of the soil disposal characterization samples.

This soil disposal characterization plan meets with Lincoln County and Montana DEQ approval on this project. If you have any questions after reviewing our soil disposal characterization plan, please call me at (800) 275-3516.

Best Regards,



David L. Welch  
Project Geologist

cc: Dave Smith, BNSF; Don Clabaugh EMR

attachments: Figure 1-East Area BNSF Rail Yard Sampling Plan-DRAFT  
Figure 2 - West Area BNSF Rail Yard Sampling Plan-DRAFT

# LEGEND:

- FENCE
- 1 — RAILROAD TRACKS WITH ASSIGNED NUMBER
- M — MAIN LINE RAILROAD TRACKS (3-4" DIAMETER QUARTZITE BALLAST AT LEAST 1-FOOT DEEP)
- == PARKED TRAIN AT TIME OF INSPECTION
- ⊕ VISIBLE BIOTITE MARKED WITH RED SURVEYOR'S WHISKER
- ED EQUIPMENT DECONTAMINATION
- DT DECONTAMINATION TRAILER
- Ⓟ POWER HOOKUP
- Ⓢ WATER HOOKUP

NW NE  
C  
SW SE

SAMPLING GRID (100'x100') WITH GRID NUMBER AND GEOGRAPHIC REGIONS CORRESPONDING TO SAMPLE (EX. 2-C, 2-NW, 2-NE, 2-SW, 2-SE)

GRID LOCATION EVALUATED

CONTAINMENT REDUCTION ZONE (CRZ)

---EZ--- EXCLUSION ZONE

--- PROJECT SITE (LEVEL D PPE REQUIRED)

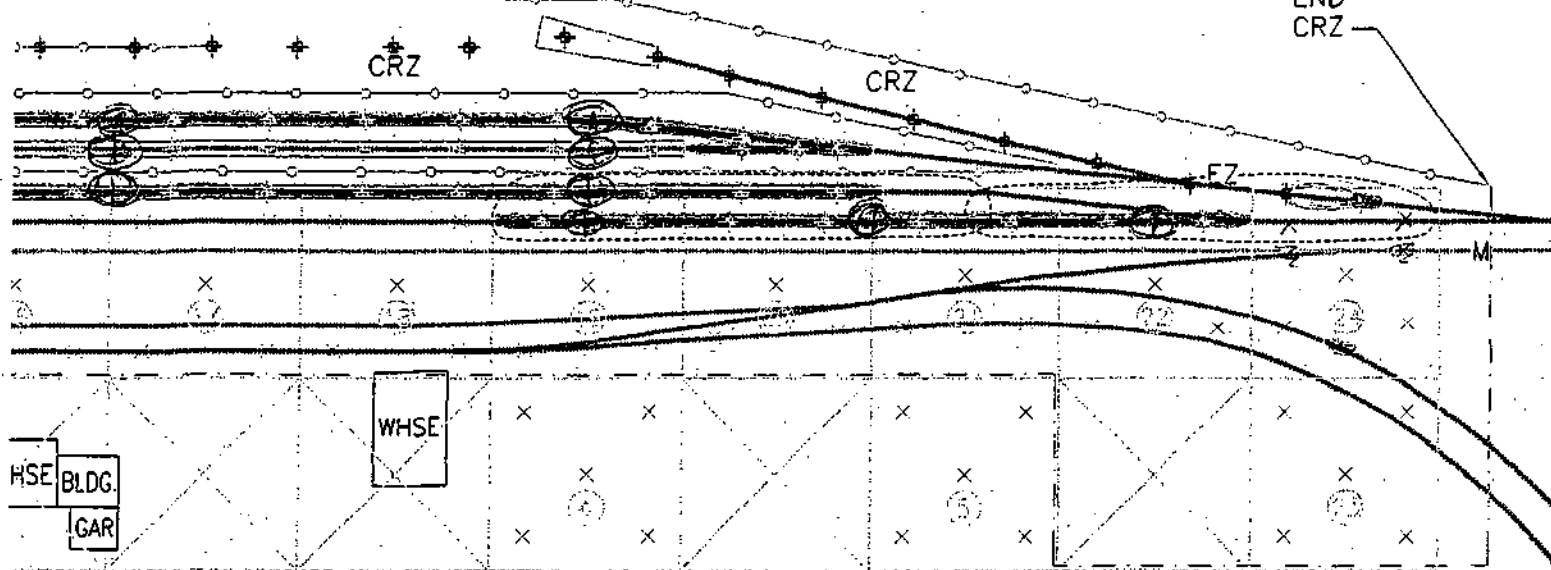
⊕ POST VACUUM REMOVAL SOIL SAMPLE (50 FT INTERVAL)

⊕ SITE INVESTIGATION SAMPLES

⊕ DISPOSAL SAMPLE CRITERIA  
END CRZ

TRANSFER & STAGING AREA

PROJECT SITE ENDS AT NORTH CRZ LINE



DRAFT  
DRAFT

## NOTE:

CLEANUP WILL PROCEED ON TRACKS 1 AND 2 FIRST MOVING EAST TO WEST AND THEN ON TRACKS 3 AND 4 MOVING EAST TO WEST. CRZ BOUNDARY WILL MOVE FROM BETWEEN TRACKS 2 AND 3 TO NORTH OF TRACK 4. EZ BOUNDARIES SHOWN ON MAP PORTRAY TWO EXAMPLE OVERLAPPING EZ BOUNDARIES. ADDITIONAL EZ BOUNDARIES WILL BE CONSTRUCTED IN SIMILAR FASHION TO WEST IN THE SAME CLEANUP PATH DESCRIBED ABOVE.

BNSF RAILWAY STATION MAP  
LIBBY, MT.

Drawn by : SES  
Checked By : G.M.C.  
Project No. : 5539.002-1  
File Name : 5539002-1.DWG  
Revision No. : 2  
Date : 10/14/02  
Scale : 1"=100'-0"

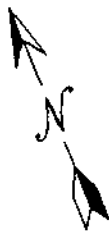
FIGURE  
1

0 100  
APPROXIMATE SCALE IN FEET

HIGHWAY BRIDGE

RIVER

LINE OF BREAK



PROJECT SITE ENDS  
AT NORTH CRZ LINE

SOIL TR  
CONTAINER STAC

ACCESS ROAD

CRZ

ED

SCALE SHACK

CRZ

DT

ASPHALT

PLATFORM

ASPHALT

ASPHALT

DEPOT

WHSE

ASPHALT

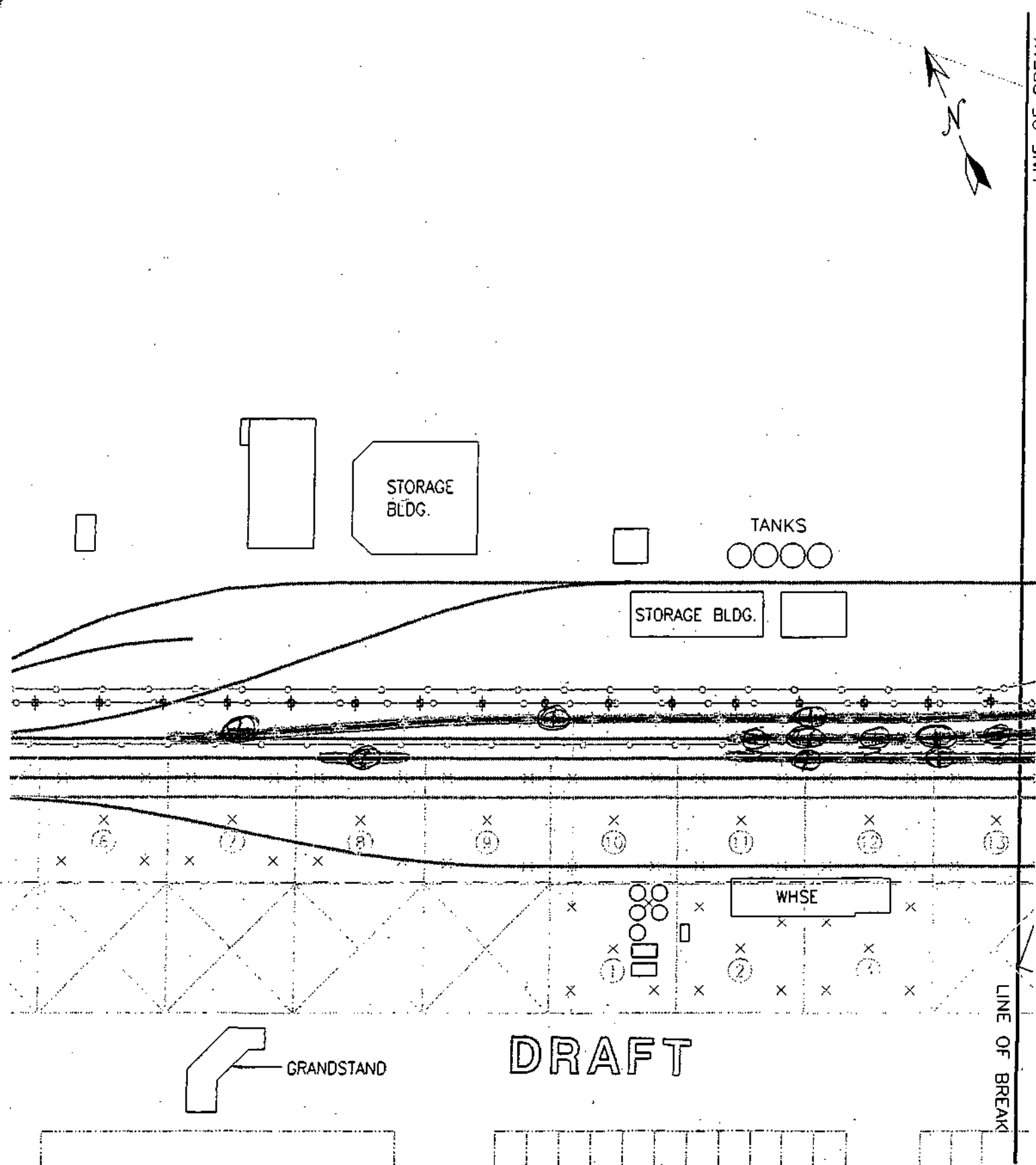
ASPHALT

ASPHALT

DRAFT



EAST AREA  
FIELD SAMPLING PLAN/  
MAP OF VISIBLE BIOTITE  
BNSF RAIL YARD  
LIBBY, MT.



0 100  
APPROXIMATE SCALE IN FEET

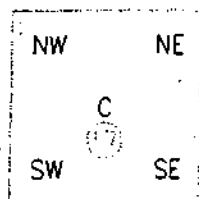
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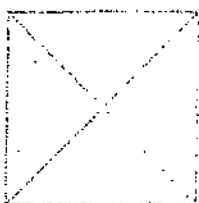
FIGURE  
2

LEGEND:

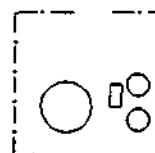
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- ☛ VISIBLE BIOTITE MARKED WITH RED  
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SAMPLING GRID (100'x100')  
WITH GRID NUMBER AND GEOGRAPHIC  
REGIONS CORRESPONDING TO SAMPLE ID'S  
(EX. 2-C, 2-NW, 2-NE, 2-SW, 2-SE)



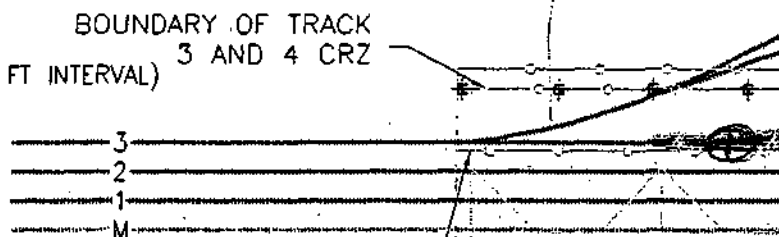
GRID LOCATION REMOVED



✦ POST VACUUM REMOVAL SOIL SAMPLE (50 FT INTERVAL) 3 AND 4 CRZ

✦ SITE INVESTIGATION SAMPLES

☛ DISPOSAL  
CRITERIA  
SAMPLE



BOUNDARY OF TRACK  
1 AND 2 CRZ

TOOL HOUSE

DRAFT

WEST AREA  
FIELD SAMPLING PLAN/  
MAP OF VISIBLE BIOTITE  
BNSF RAIL YARD  
LIBBY, MT.

